Method for Fabricating Semiconductor Memories with Charge Trapping Memory Cells

ABSTRACT OF THE DISCLOSURE

A method for manufacturing a semiconductor device includes forming a storage layer over a semiconductor body. The storage layer includes a first boundary layer, an intermediate storage layer and a second boundary layer. The storage layer is patterned so that at least some of the storage layer is removed from over a first portion of the semiconductor body and some of the storage layer is removed from over a second portion of the semiconductor body. The first portion of the semiconductor body is doped and the second portion of the semiconductor body is etched.